

ELNEC
End-of-Life Nursing Education Consortium

Module 3

Symptom management





Essential elements of symptom management include:

- Ongoing **Assessment** and Evaluation
- cohesive interdisciplinary **teamwork** to ensure optimal care
- Reimbursement and other **financial** concerns (affordable options)
 - Each **test** ordered should help determine an intervention
 - If no change in management will result, the test should be questioned
- *Palliative care is in its infancy and a great deal of research is needed in the area of symptom management.*

Symptom and suffering



- Symptoms create suffering and distress
- Psychosocial intervention is key to complement pharmacologic strategies
- There is need for interdisciplinary care

Common EOL (End-of-Life) Symptoms

- Respiratory distress
 - Dyspnea, cough
- GI symptoms
 - Anorexia, constipation, diarrhea, nausea/vomiting
- General/Systemic
 - Fatigue/weakness
- Psychological
 - Depression, anxiety, delirium/agitation/confusion

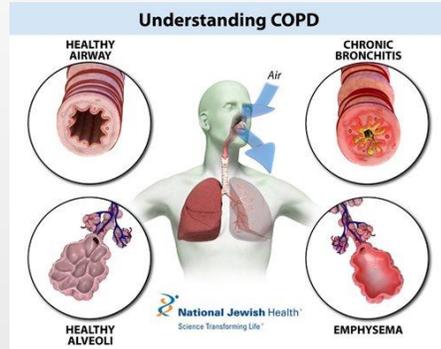
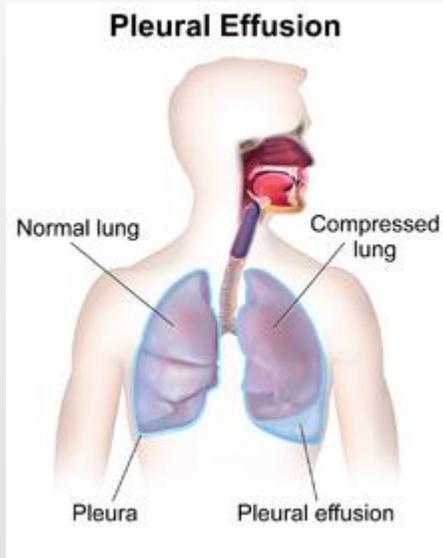


Dyspnea

- Defined as: Distressing shortness of breath
- The experience of dyspnea can be extremely frightening
- Associated diseases:
 - Lung disease
 - Heart disease
 - Stroke
 - Dementia
 - End-stage renal disease
 - Metastatic cancer



Causes of Dyspnea



- Major **pulmonary** causes:
 - Tumor infiltration, aspiration, pleural effusion, superior vena cava syndrome, pneumonia, pulmonary embolism, Chronic obstructive pulmonary disease (COPD), thick secretions caused by an infectious process or dehydration, bronchospasm, ascites,
- Major **cardiac** causes:
 - Congestive heart failure
 - Pulmonary edema and pulmonary hypertension
 - Severe anemia
 - Cardiovascular disease
- Major **neuromuscular** causes
 - amyotrophic lateral sclerosis (ALS)
 - Muscular dystrophy
 - Myasthenia gravis
 - Cerebrovascular disease
 - Trauma as a result of physical injury
- **Other** causes

Assessment of Dyspnea

- • Use subjective report (only reliable indicator)
- • Clinical assessment
 - – physical exam (elevated jugular pressure, bilateral crackles, respiratory rate/depth, use of accessory muscles, pain, functional status)
 - – diagnostic tests

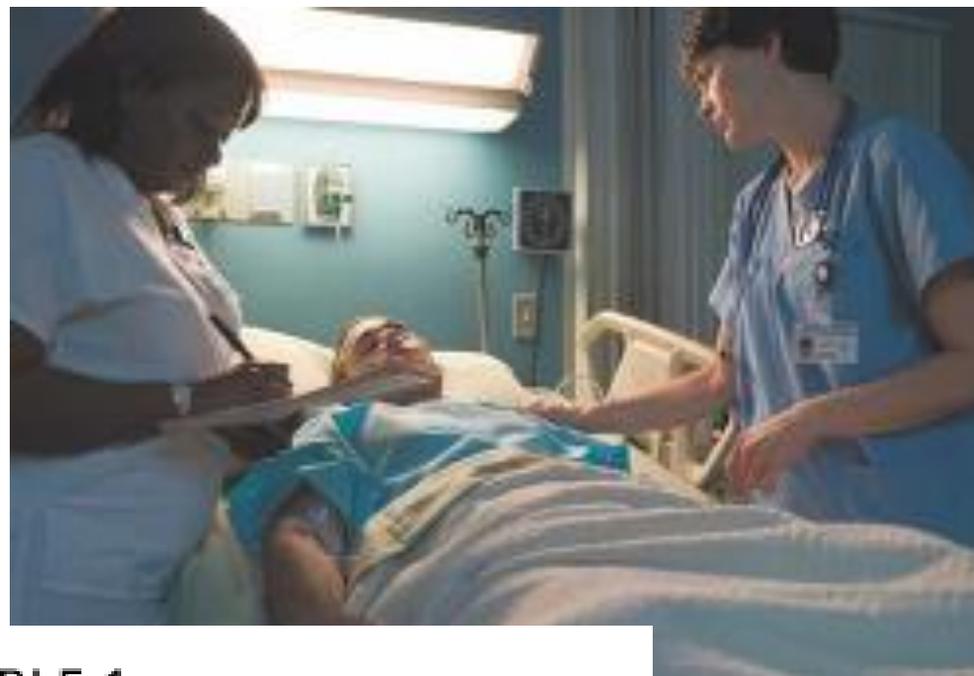
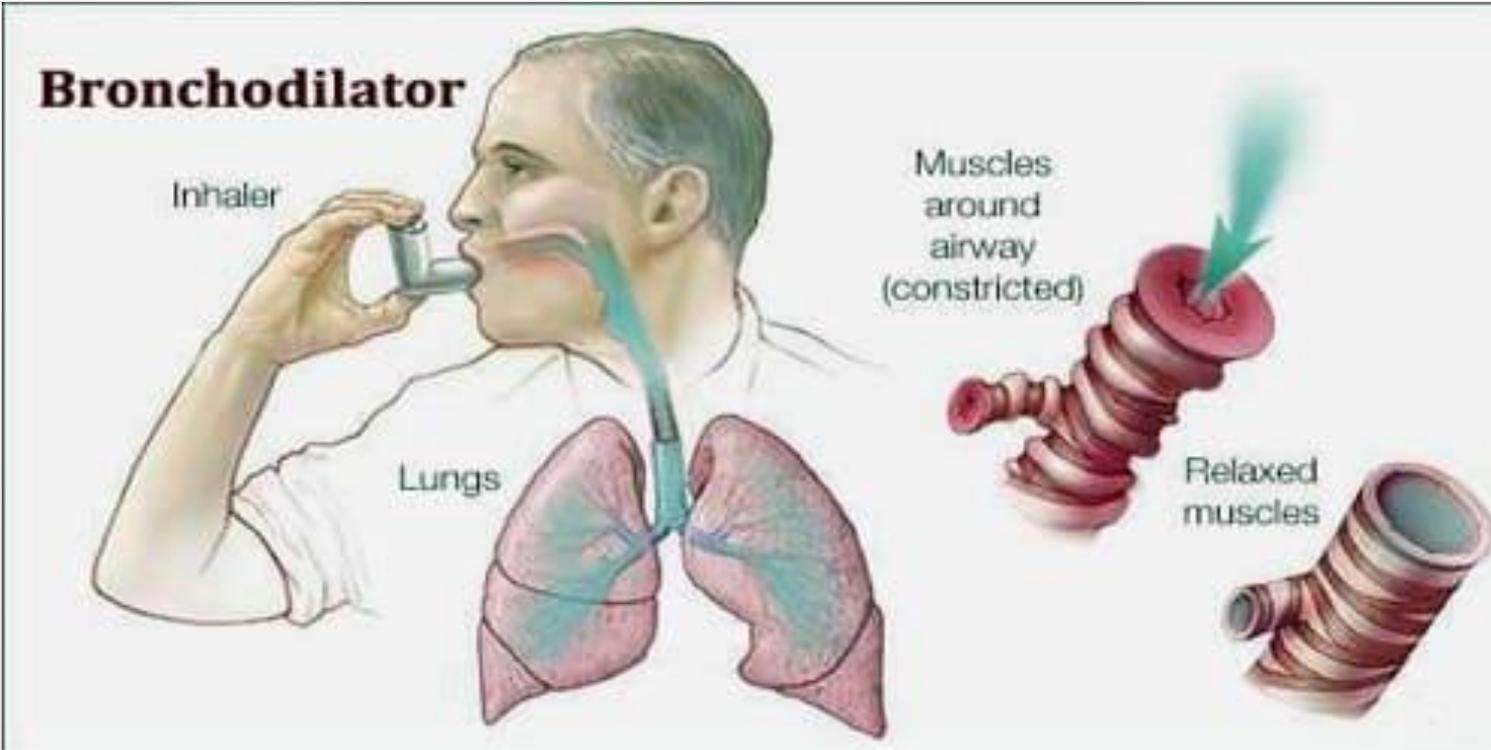


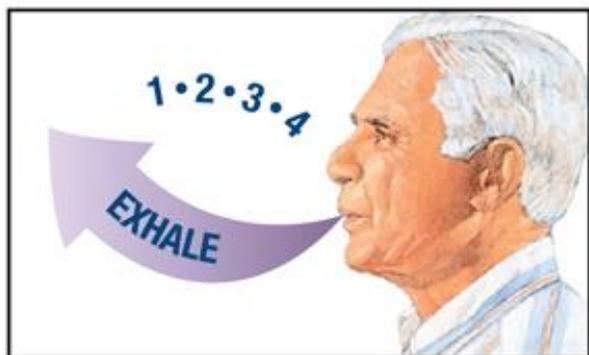
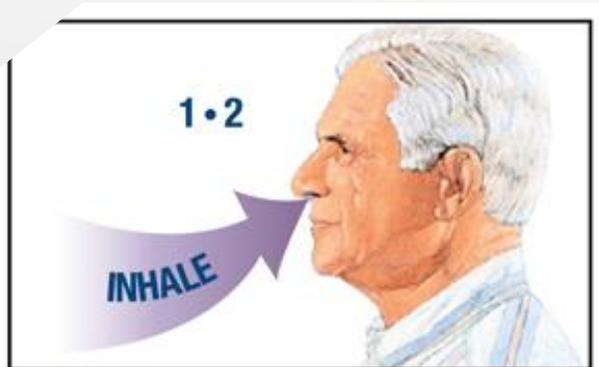
TABLE 1

Normal ABG Figures	
PH	7.35-7.45
PO2	80-100
PCO2	35-45
HC03	22-28



Treatment of Dyspnea

- Treat symptoms or underlying cause
- Pharmacologic treatments to improve respiration/oxygenation:
 - – opioids
 - – bronchodilators
 - – diuretics
 - – other



Treatment of Dyspnea

- **Nonpharmacologic:**

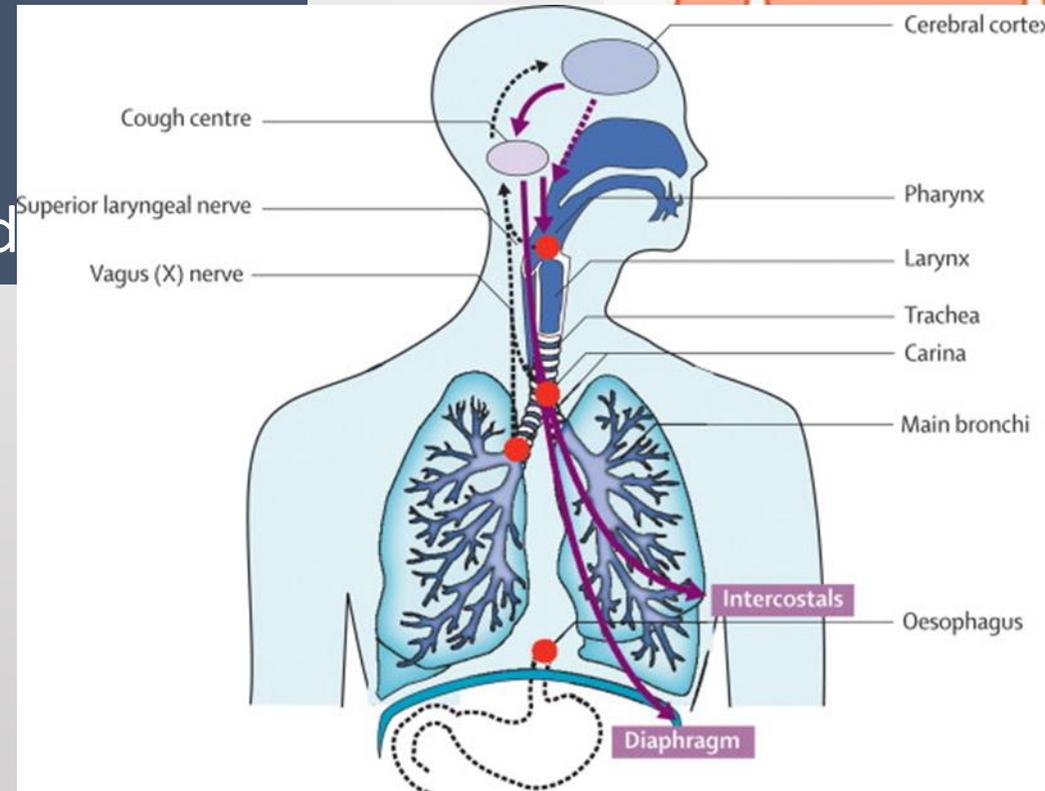
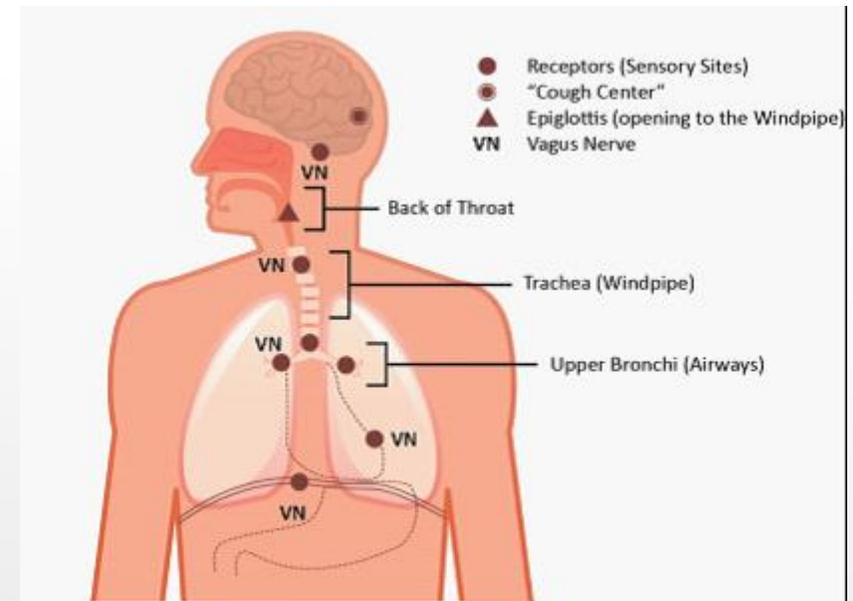
- – Give Oxygen
- – Counseling
- – Teach pursed lip breathing
- – Teach energy conservation
- – Provide fans, torax elevation
- – others

COUGH

- Common symptom in advanced disease
- Causes pain, fatigue, insomnia

CAUSES OF COUGH

- Assess underlying cause (e.g. infection, sinusitis, reflux)
- Assess type of cough
- Assess associated symptoms
- Diagnostic tests may be needed



Pharmacologic Interventions for Cough

- Suppressants/expectorants
- Antibiotics
- Steroids
- Anticholinergics



Antitussives, Expectorants and Mucolytics

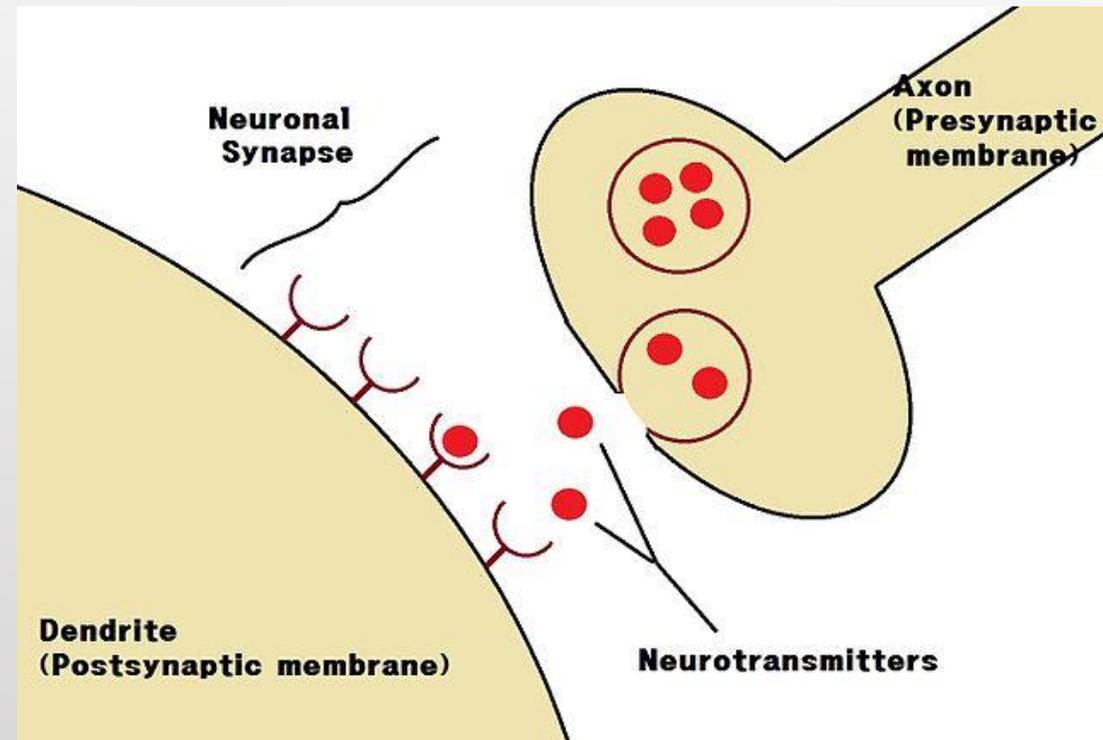
ANTITUSSIVE used to prevent or relieve a cough

EXPECTORANT promotes the secretion of sputum by the air passages, used especially to treat coughs

MUCOLYTIC acts to break down thick mucus



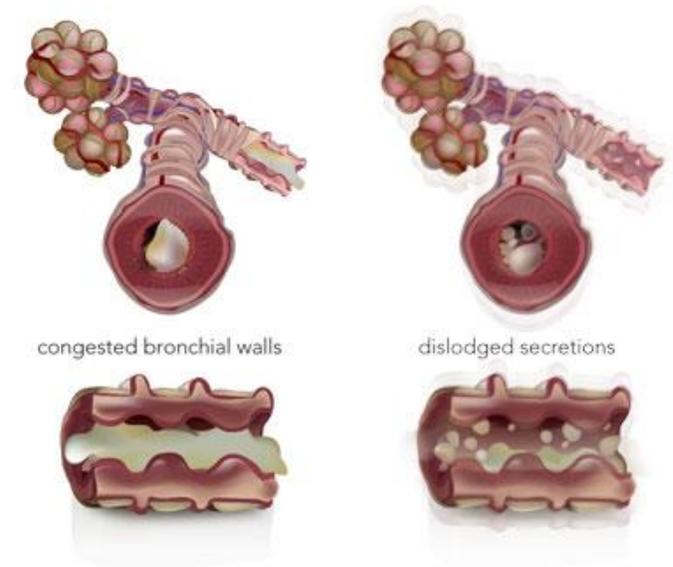
WWW.NURSEBUFF.COM



Cholinergic drugs	Anticholinergic drugs
<p>Exocrine glands</p> <p>Increase of sweat, saliva, lacrimal, bronchial, intestinal secretions</p>	<p>Decrease all secretion</p>
<p>GIT</p> <p>↑ peristalsis ↑ secretion relaxation of sphincter</p>	<p>↓ peristalsis ↓ secretion ↓ Contraction of sphincter</p>
<p>Lung</p> <p>1. Bronchoconstriction 2. ↑ bronchial secretion</p>	<p>1. Bronchodilatation 2. Decrease secretion</p>

Non-Pharmacologic Interventions for Cough

- Chest PT
- Humidifier
- Positioning



Anorexia and Cachexia

- Anorexia: loss of appetite, usually with decreased intake
- Cachexia : lack of nutrition and wasting





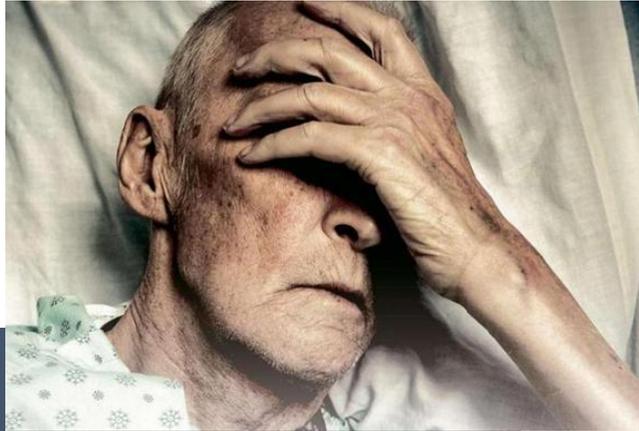
Causes of Anorexia and Cachexia

- Disease related
- Psychological
- Treatment related



For what shall it profit a man, if he shall gain the whole world, and lose his own soul?

Assessment of Anorexia and Cachexia



- Assess:

- Physical findings
- Impact on function and QOL
- Calorie counts/daily weights
- Lab tests => low albumin*
- Skin breakdown

***Albumin** is the most abundant plasma protein. Its **essential** role is to regulate passage of water and solutes through the capillaries by maintaining colloidal oncotic pressure within the vasculature. ... During nutrient deprivation, protein synthesis by the liver is altered, resulting in low serum protein levels.



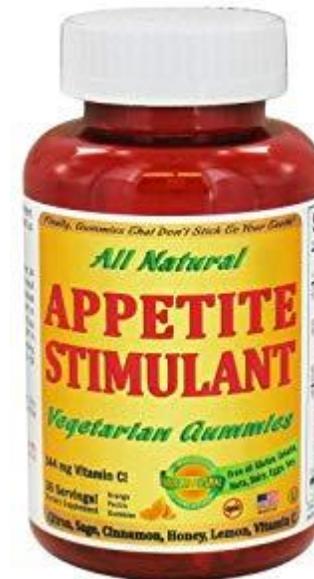
From "Fundamentals of Clinical Nutrition" by F. L. Weinsier copyright 1983 by Mosby-Year Books N.Y.
Fig. 9-3 (A–D) Clinical findings in kwashiorkor, including easy, painless hair pluckability, pitting edema, skin breakdown, and delayed wound healing.



TREAT:

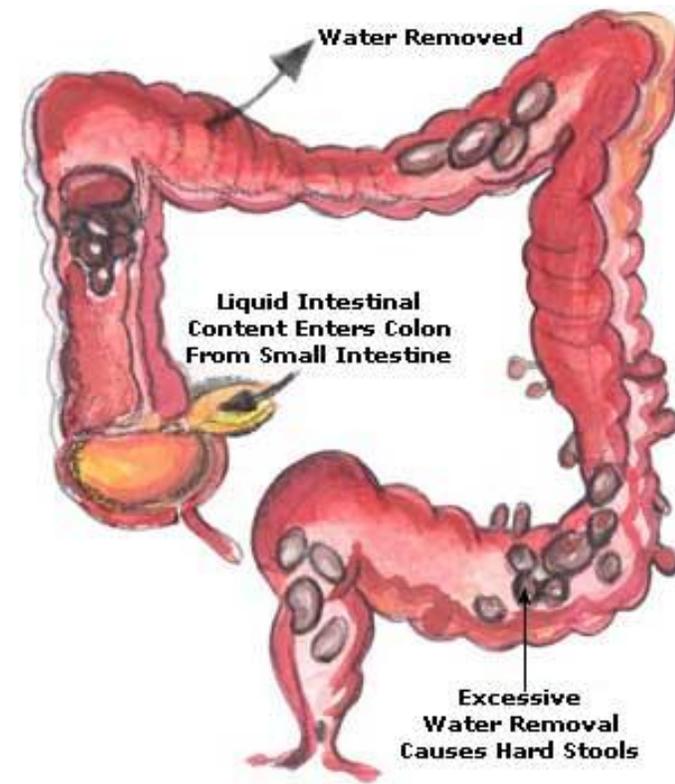
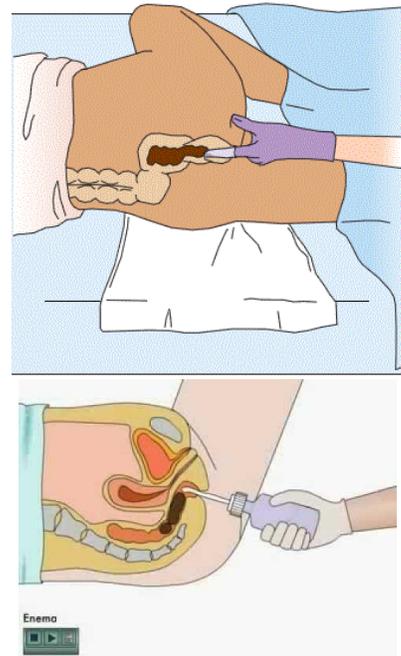
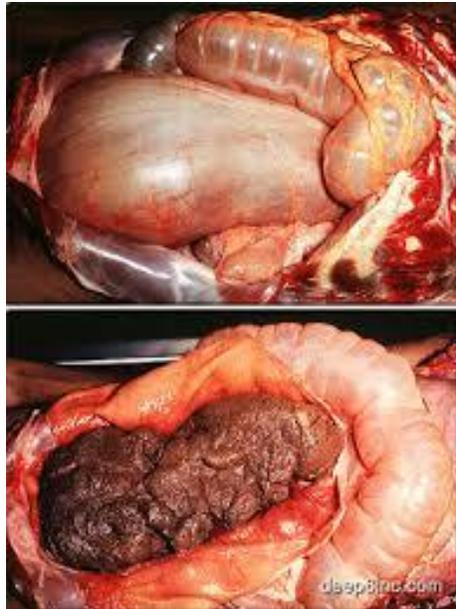
- Dietary consultation
- Medications
- Parenteral/enteral nutrition
- Odor control
- Counseling

Treatment of Anorexia and Cachexia



Constipation

- Constipation is infrequent passage of stool
- It is a frequent symptom in palliative care
- Prevention is key

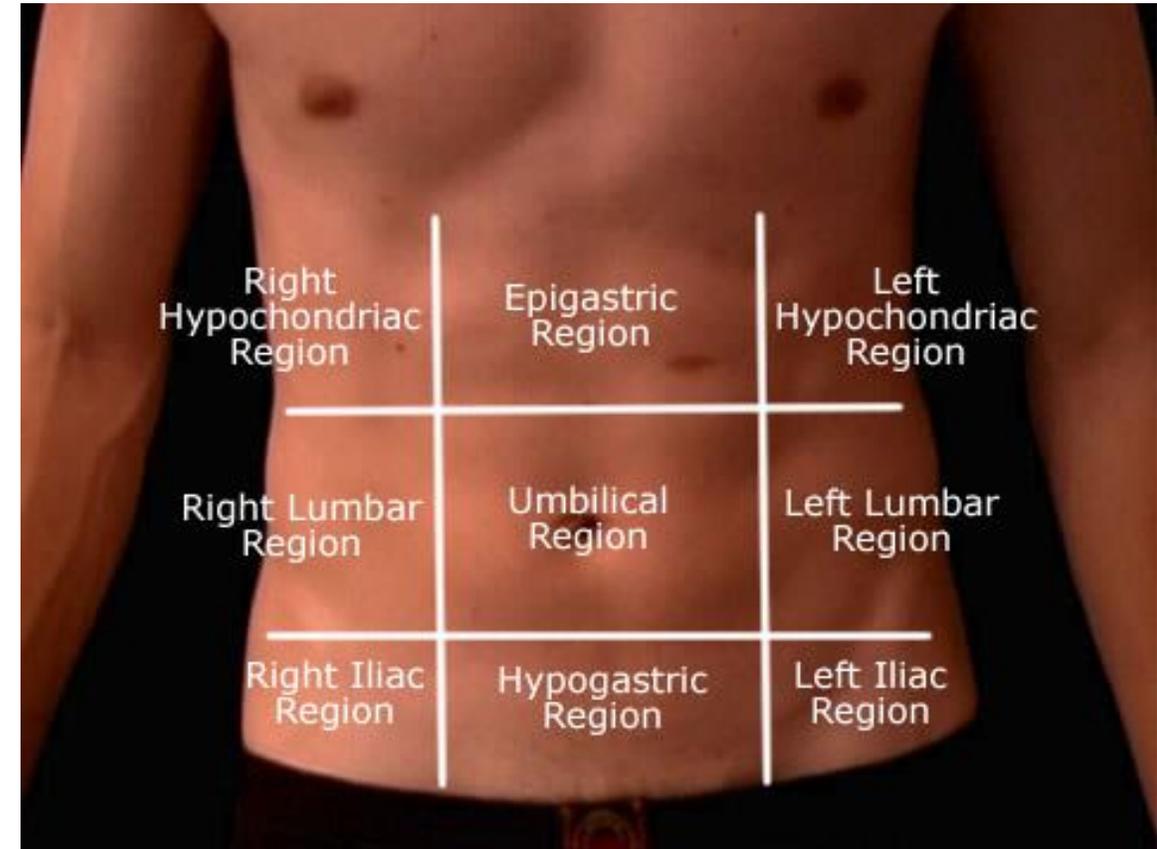
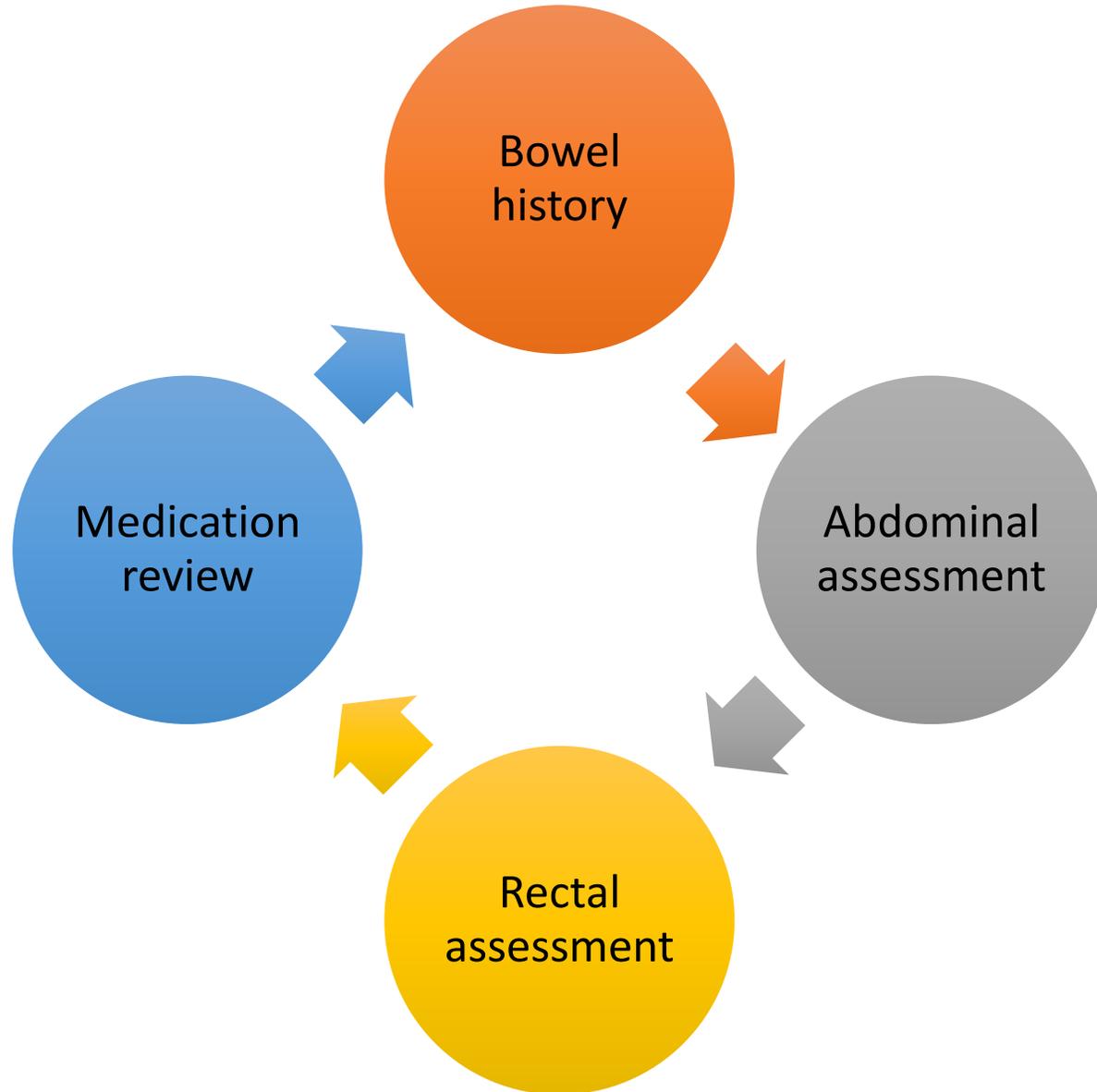


Common Causes of Constipation



- Disease related
 - Obstruction
 - Hypercalcemia
 - Neurologic,
 - Inactivity
 - others
- Treatment related
 - Opioids
 - other meds

ASSESSMENT OF CONSTIPATION



Treatment of Constipation

- Medications
- Dietary/fluids
- Other approaches

Treatment of Chronic Constipation

- Goals of therapy
 - Improve symptoms and restore normal bowel function
 - Accelerate colonic transit
 - Stimulate gut motility
 - Facilitate defecation
 - Promote intestinal secretion



Laxatives

Home Remedies for Constipation in Kids

www.spicykitchen.net



Black Dry Grapes



Orange



Dates



Brown Rice



Papaya



Oregano Leaves



Water

Diarrhea - treatments



DIARRHEA: Frequent passage of loose, nonformed stool

- Effects
 - Fatigue
 - caregiver burden
 - skin breakdown

BRISTOL STOOL CHART



TYPE 1 - SEVERE CONSTIPATION

Separate, hard lumps



TYPE 2 - MILD CONSTIPATION

Lumpy and sausage like



TYPE 3 - NORMAL

A sausage-shape with cracks in the surface



TYPE 4 - NORMAL

Like a smooth, soft sausage or snake



TYPE 5 - LACKING FIBER

Soft blobs with clear-cut edges



TYPE 6 - MILD DIARRHEA

Mushy consistency with ragged edges



TYPE 7 - SEVERE DIARRHEA

Liquid consistency with no solid pieces

Causes of Diarrhea

- Disease related
- Malabsorption
- Concurrent diseases
- Psychological
- Treatment related

Assessment of Diarrhea

- Bowel history
- Medication review
- Infectious processes

Common Causes of Sudden or Chronic Diarrhea

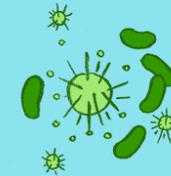
Sudden Diarrhea



Food poisoning



Traveler's diarrhea



Stomach flu

Chronic Diarrhea



Celiac disease



Food intolerance/
allergy



Milk/soy protein
intolerance



IBS



Medication



Treatment of Diarrhea

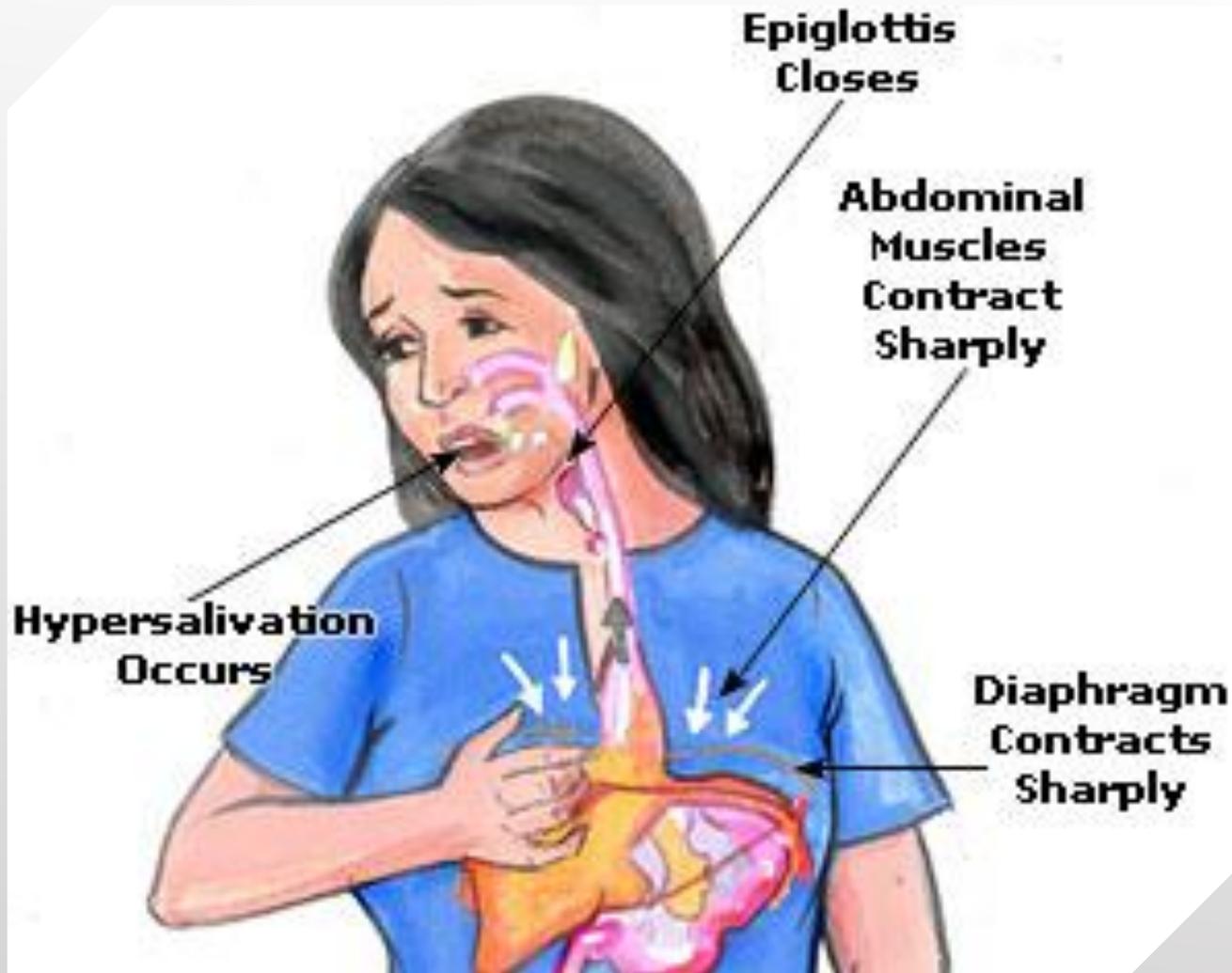
- **Treat underlying cause**
- Dietary modifications
- **Hydration**
- Pharmacologic agents





Nausea and Vomiting

- Common in advanced disease
- Assessment of etiology is important
- Acute, anticipatory or delayed



Causes of Nausea and Vomiting

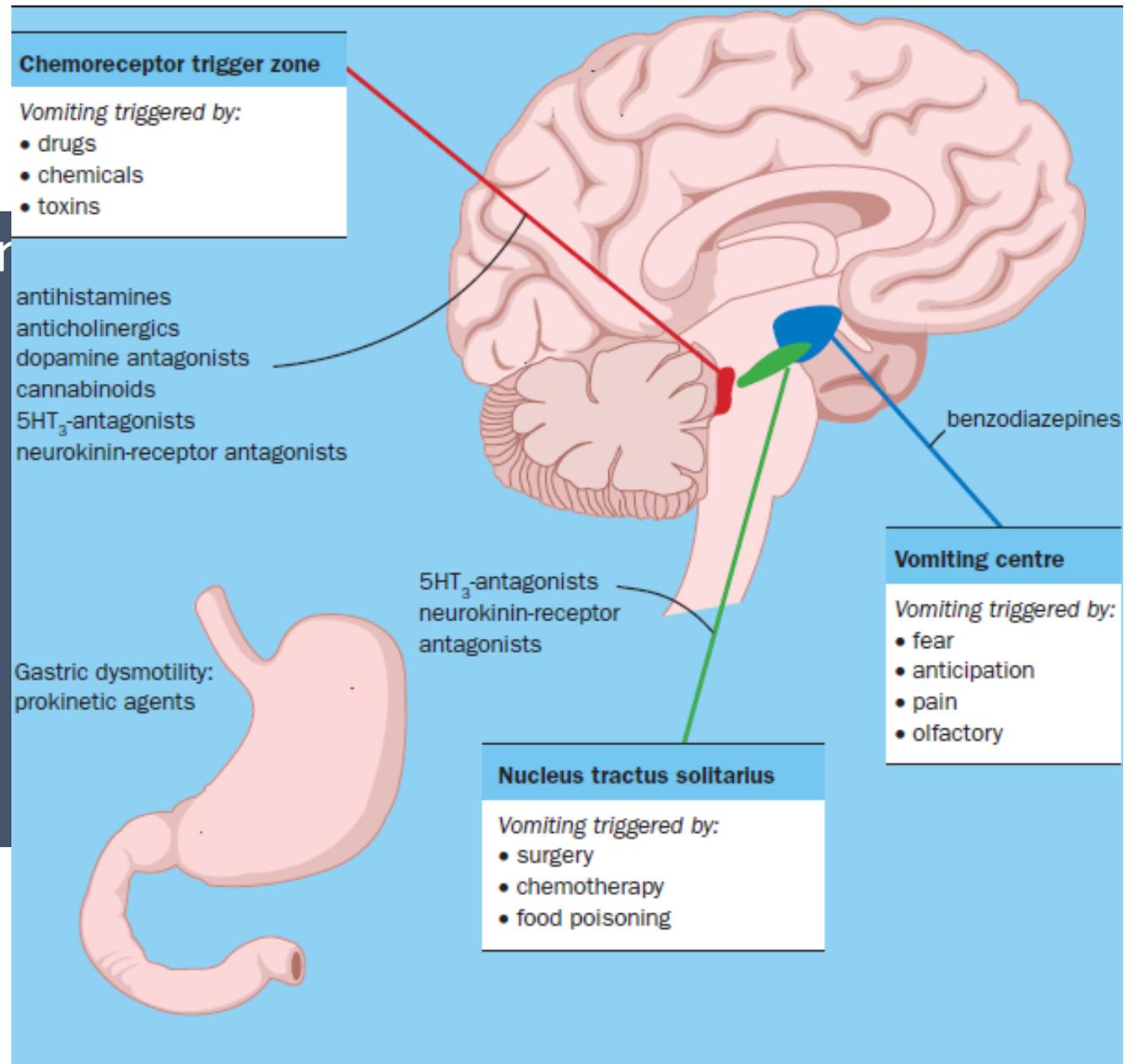
- Physiological (GI, metabolic, CNS)
- Psychological
- Disease related
- Treatment related
- Other

Assessment of Nausea and Vomiting

- Physical exam
- History
- Lab values

Pharmacologic

- Treatment of Nausea and Vomiting
- Anticholinergics
- Antihistamines
- Steroids
- Prokinetic agents
- Other



Non-Drug Treatment of Nausea and Vomiting

- Distraction/relaxation
- Dietary
- Small/slow feeding
- Invasive therapies

Treatments for Nausea and Vomiting During Pregnancy

Dietary changes

- Eat bland foods high in carbohydrates and proteins
- Avoid foods with strong odors or flavors
- Eat small, frequent meals



Prescription medications

- Vitamin B₆/doxylamine combination
- Antihistamines
- Dopamine antagonists
- Serotonin antagonists



Over-the-counter remedies

- Acupressure
- Vitamin B₆
- Ginger



Fatigue

- Subjective, multidimensional experience of exhaustion
- Commonly associated with many diseases
- Impacts all dimensions of QOL



Causes of Fatigue

- Disease related
- Psychological
- Treatment related

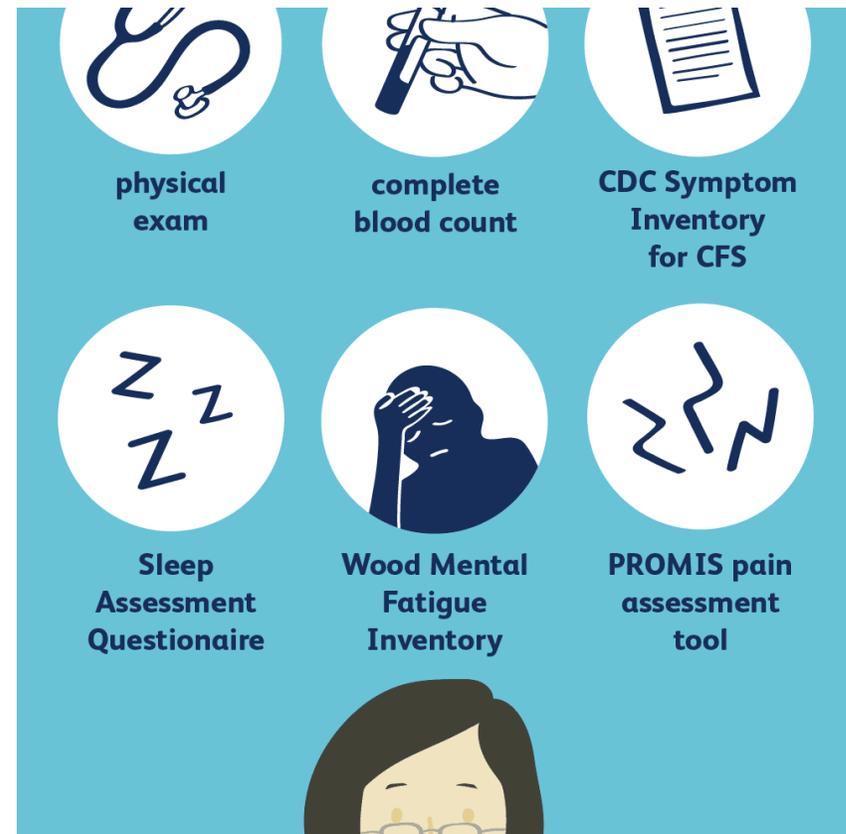


ASSESSMENT OF FATIGUE

- Subjective
- Objective
- Laboratory data

TREATMENT OF FATIGUE

- Pharmacologic
- Nonpharmacologic (rest, foods, energy conservation, involve PT/OT)



FATIGUE FIGHTING FOODS

5 foods that create long-lasting energy.



NUTS & SEEDS



BEANS



DEPRESSION

- Ranges from sadness to suicidal
- Often unrecognized and undertreated
- Occurs in 25-77% of terminally ill
- Distinguish normal vs. abnormal
- Should not be dismissed

- **Causes of Depression**
 - Disease related
 - Psychological
 - Medication related
 - Treatment related



ASSESSMENT OF DEPRESSION

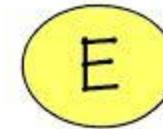
- Situational factors/symptoms
 - Previous psychiatric history
 - Other factors (e.g. lack of support system, pain)
-
- **Example Questions for Depression Assessment**
 - How have your spirits been lately?
 - What do you see in your future?
 - What is the biggest problem you are facing?



DEPRESSION ASSESSMENT

(SIG E CAPS)

- Sleep Disturbances
- Interest Decreased in Pleasure Activities & Sex
- Guilty Feelings



- Energy Decreased



- Concentration
(Decreased)



- Appetite
(↑ or ↓)



- Psychomotor
Function ↓



- Suicidal
Ideations

SUICIDE ASSESSMENT

- Do you think life isn't worth living?
- Have you thought about how you would kill yourself?

PHARMACOLOGIC INTERVENTIONS FOR DEPRESSION

- Antidepressants
- Stimulants
- Non-benzodiazepines
- Steroids

SAFE-T

Suicide Assessment Five-step Evaluation and Triage

1

IDENTIFY RISK FACTORS

Note those that can be modified to reduce risk

2

IDENTIFY PROTECTIVE FACTORS

Note those that can be enhanced

3

CONDUCT SUICIDE INQUIRY

Suicidal thoughts, plans, behavior, and intent

4

DETERMINE RISK LEVEL/INTERVENTION

Determine risk. Choose appropriate intervention to address and reduce risk

5

DOCUMENT

Assessment of risk, rationale, intervention, and follow-up



Non-Pharmacologic Interventions for Depression

- Promote autonomy
- Grief counseling
- Draw on strengths
- Use cognitive strategies

ANXIETY

- Subjective feeling of apprehension
- Often without specific cause
- Categories of mild, moderate, severe



Causes of Anxiety

- Medications and substances
- Uncertainty

Assessment of Anxiety

- Physical symptoms
- Cognitive symptoms
- Questions for assessment

GAD-7

Over the <u>last 2 weeks</u> , how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3

Total Score _____ = Add Columns _____ + _____ + _____

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all

Somewhat difficult

Very difficult

Extremely difficult

Pharmacologic Interventions for Anxiety

- Antidepressants
- Benzodiazepines/anticonvulsants
- Neuroleptics
- Non-benzodiazepines

Non-pharmacologic Interventions for Anxiety

- Empathetic listening
- Assurance and support
- Concrete information/warning
- Relaxation/imagery



Delirium/Agitation/ Confusion

- Delirium - Acute change in cognition / awareness
- Agitation - accompanies delirium
- Confusion - disorientation, inappropriate behavior, hallucinations

Causes

- Infection
- Medications
- Hypoxemia
- Bladder distention
- Other causes



Assessment

- Physical exam
- History
- Spiritual distress
- Other symptoms

Confusion Assessment Method

Feature 1: Acute Onset and Fluctuating Course	Obtained from a family member or nurse: <ul style="list-style-type: none">• Is there evidence of an acute change in mental status from the patient's baseline?• Did the (abnormal) behavior fluctuate during the day, that is, tend to come and go, or increase and decrease in severity?
Feature 2: Inattention	<ul style="list-style-type: none">• Did the patient have difficulty focusing attention, for example, being easily distractible, or having difficulty keeping track of what was being said?
Feature 3: Disorganized thinking	<ul style="list-style-type: none">• Was the patient's thinking disorganized or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?
Feature 4: Altered Level of consciousness	<ul style="list-style-type: none">• Overall, how would you rate this patient's level of consciousness? alert [normal]), vigilant [hyperalert], lethargic [drowsy, easily aroused], stupor [difficult to arouse], or coma [unarousable])

The diagnosis of delirium by CAM requires the presence of features 1 and 2 and either 3 or 4.

Treatment

- Pharmacologic
- Evaluate medications
- Reorientation
- Relaxation/distraction
- Hydration



MANAGEMENT STRATEGIES & PRECAUTIONS

- Avoid poly-pharmacy
- Attempt to restore sleep integrity
- Minimise the use of antipsychotics and _____
- Titrate the dose, maintenance of the dose and later taper it according to the course of symptoms
- Monitor the condition by using assessment tools
- Find the cause of delirium and repeat the necessary investigations until then



WOUNDS

- Assess Patients at risk
- Adopt Prevention as key

Assessment of Wounds

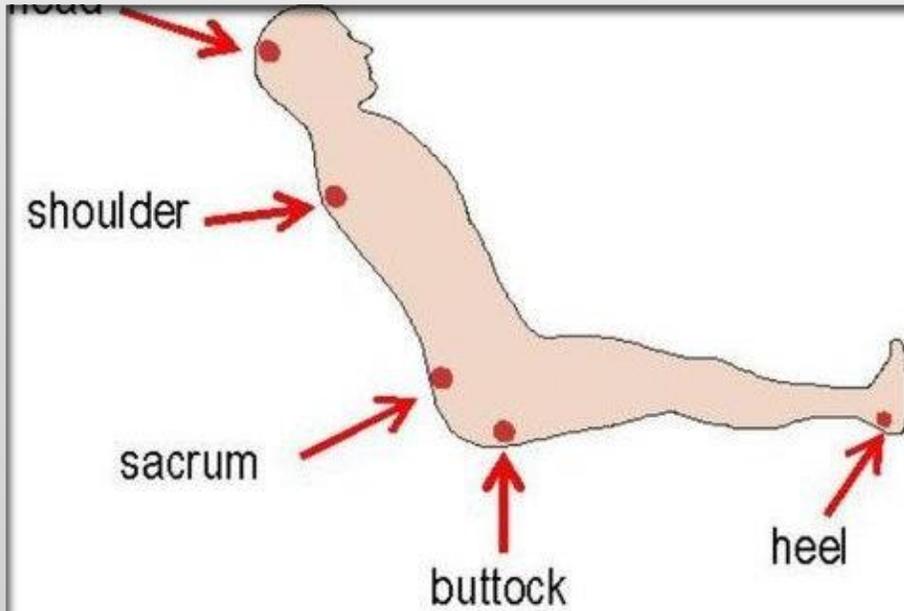
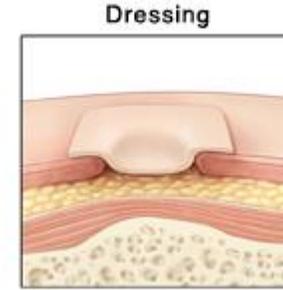
- Characteristics
- Pain
- Psychosocial
- Caregivers





Treatment of Wounds

- Wound cleaning
- Dressings
- Provide analgesia
- Seek consultation



Pressure Ulcers

Skin Care and Early Treatment

- Inspect skin at least once a day.
- Individualize bathing schedule (Avoid hot water and mild cleansing agent)
- Minimize environmental factors such as low humidity and cold air.
- Use moisturizers for dry skin
- Avoid massage over bony prominences.
- Use proper positioning, transferring, and turning techniques.
- Use lubricants to reduce friction injuries.
- Rehabilitation program.
- Monitor and document interventions/outcomes.

Seizures

- Definition
- Causes
 - Infections
 - Trauma
 - HIV
 - Tumors
 - Medications
 - Metabolic imbalances

Definitions: Seizure, Epilepsy, Epilepsy Syndrome

Seizure

- Electrical storm on the surface of the brain
- Abnormal hypersynchronous discharge of cortical neurons
- Focal (partial-onset) seizures most common type

Epilepsy

- Tendency to have seizures
- Recurrent, unprovoked seizures
- Affects 1% of general population^a

Epilepsy Syndrome

- Constellation of signs and symptoms, eg, Lennox-Gastaut syndrome

a. *MMWR*.2013.^[1]

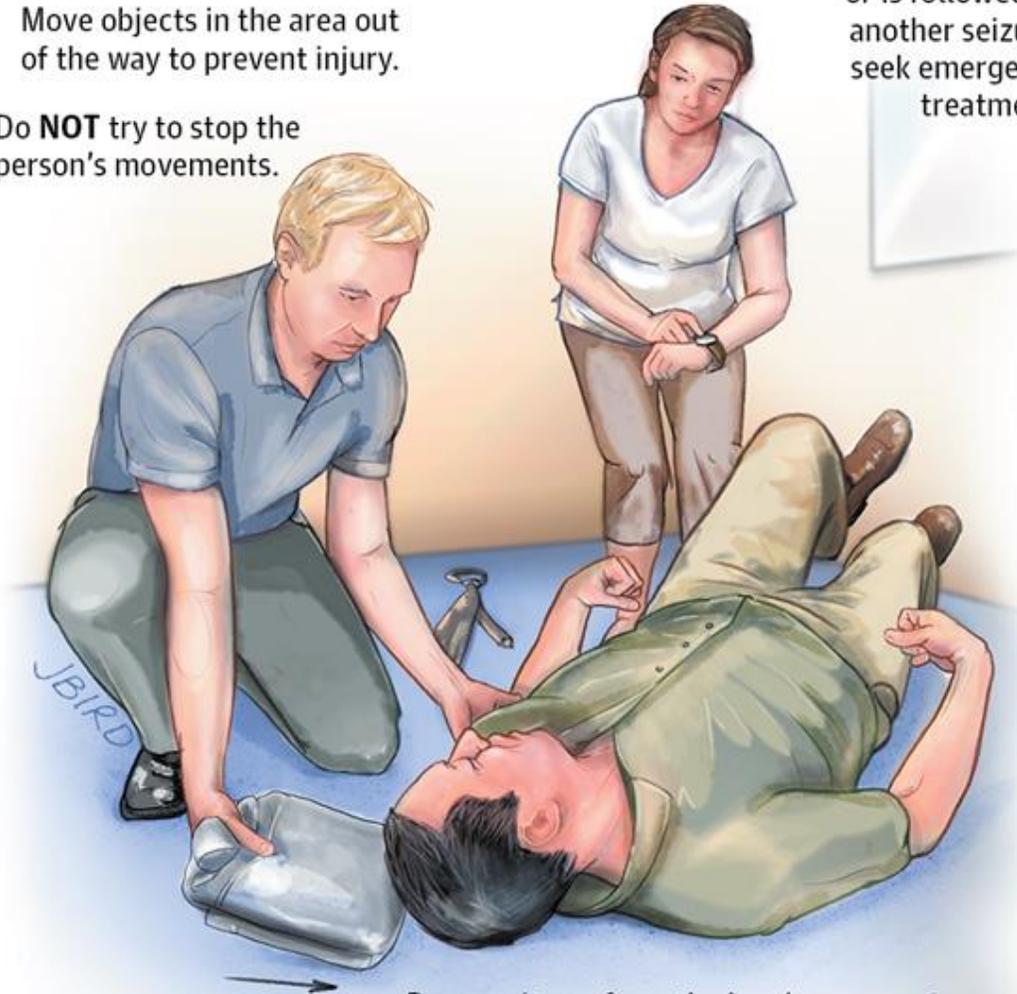
If you see someone having a tonic-clonic seizure

Try to lay the person on the floor and gently turn him onto his side.

Time the seizure. If it lasts longer than 5 minutes or is followed by another seizure, seek emergency treatment.

Move objects in the area out of the way to prevent injury.

Do **NOT** try to stop the person's movements.



Place something soft and flat under the head.

Remove items from the head and anything around the neck that might restrict breathing.



Do **NOT** put anything in the person's mouth.

First Aid: Convulsions



Loosen tight clothing

Lay the person on the ground

Cushion the person's head

ADAM

Nursing Management

- Assessment and monitoring of respiratory and cardiac function
- Antiseizure medications and sedatives.
- Monitoring and documenting the seizure activity and the patient's responsiveness.
- The patient is turned to a side-lying position, if possible, to assist in draining pharyngeal secretions.
- The IV line is closely monitored

Assessment for Seizures

- Manifestations:
 - Aura
 - Mental status changes
 - Sensory changes
- Physical exam
- Labs

Treatment for Seizures

- Limit trauma
- Anticonvulsant treatments:
 - Phenytoin, Phenobarbital
 - Lorazepam, Diazepam

Seizures: ASSESSMENT

History:

- 1st seizure/ recurrent seizures
- Fever
- Precipitating factors – diarrhea/vomiting/ drug/ toxin/ metabolic
- Headache/vomiting/visual loss
- Duration
- Age at onset
- No of attacks
- Frequency ↑/↓, change in seizure type, last seizure when?
- Exact description
 - Aura
 - partial/generalised onset
 - Loss of consciousness
 - Tonic/clonic phase
 - Associated events - bed wetting/fall/tongue bite
 - Duration
 - Post ictal
- Precipitating factors
- Diurnal
- Family history
- Antecedant events - trauma/CNS infection/asphyxia
- Personality change/intellectual deterioration
- Failure to thrive
- Developmental milestones
- Treatment

FEVERS

- Definition
- Causes
 - –Infection –Tissue injury –Altered thermoregulation

Assessment/Treatment of Fevers

- Clinical
 - Flushing
 - Malaise/fatigue
 - Rigors/shaking

Treatment

- –Antibiotics –Antipyretics –Cooling measures



LYMPHEDEMA

- Chronic, progressive swelling due to failure of lymph drainage

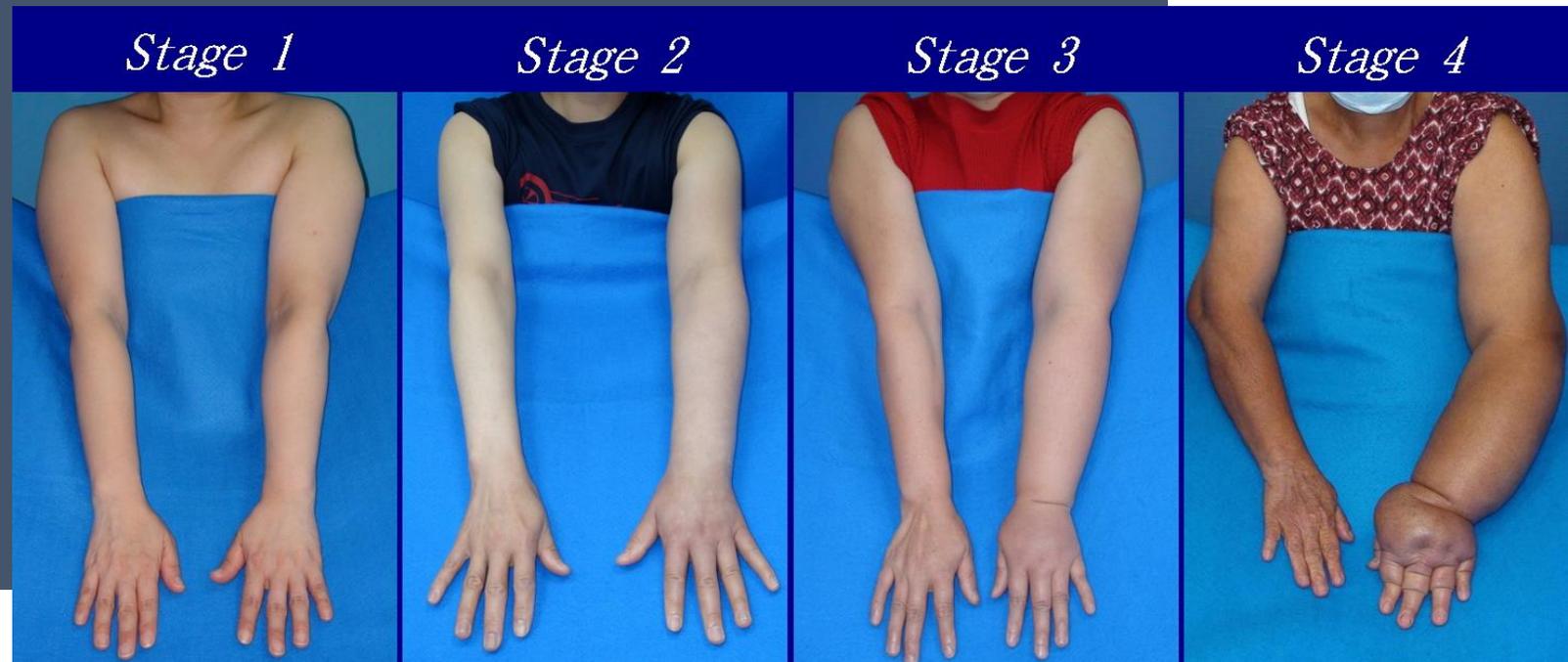
Assessment of Lymphedema

- Assess Patients at risk
- History of disease/treatment
- Physical exam

Education

Compassion

Other



Key Nursing Roles

- Patient advocacy
- Assessment
- Pharmacologic treatments
- Non-pharmacologic treatments
- Patient/family teaching



Conclusion

- Multiple symptoms are common
- Coordination of care with physicians and others
- Use drug and nondrug treatment
- Patient/family teaching and support

